

Building Standards Committee

DSA Advisory Board

Final Minutes of Meeting

Thursday, February 17, 2005

California Community Colleges Building
1102 Q Street, 5th Floor, Conference Room A
Sacramento, California

Committee Members Present

Thomas Shih, Chair
Bob Dyson
Kennith Hall
Pete Peterson
Art Ross (arrived at 12:45 p.m.)
Lowell Shields (arrived at 10:55 a.m.)

Committee Members Absent

Gale Bate, Vice Chair
Paul Beyl
Mike Modugno
David Smith
Jim Ward

DSA Staff Present

Mary Ann Aguayo, Executive Director, DSA AB
Dennis Bellet
David Casey
Susan Georgis
Elizabeth Schroeder
Chip Smith
Elena Tarailo

Others Present

Larry Foley, Trus Joist
Jack McMullen, California Geological Survey

1 **I. Call to Order and Introductions**

2 Committee Chair Thomas Shih called the meeting to order at 10:00 a.m. and participants
3 took turns introducing themselves.

4

5 Mr. Shih noted a quorum was not present, so the committee could take no formal actions or
6 votes.

7

8 **II. Review of Prior Meeting Minutes & Follow-Up Items**

9 Mr. Shih drew attention to the minutes of the April 21, 2004 committee meeting and
10 welcomed comments. Committee members proposed no changes or corrections.

11

12 Ms. Elena Tarailo stated that the Board already approved the minutes at its last quarterly
13 meeting.

14

15 Ms. Mary Ann Aguayo drew attention to the list of follow-up items compiled by the staff. Mr.
16 Shih observed that most of the issues would be addressed as part of later agenda items.

17

18 **A. NFPA 5000 Code Development Update**

19 Mr. Chip Smith reported that at the January hearing before the Building Standards
20 Commission, DSA informed the Building Standards Commission that the code development
21 process was at a standstill, pending resolution of copyright issues and receipt of complete

1 drafts of proposed amendments from NFPA staff. After hearing similar testimony from
2 other agencies, the Building Standards Commission directed the Coordinating Council to
3 reconvene and arrive at a recommendation regarding how to proceed.

4
5 Mr. Smith said the Coordinating Council met on Wednesday, February 9, DGS elaborated
6 on the obstacles that were discussed at the Commission hearing. The next meeting is
7 scheduled for Tuesday, February 22, and an agenda has been posted on the Building
8 Standards Commission's Website. Mr. Smith observed that the meeting will be a fact-
9 finding session where state agencies and others can express views and provide
10 information pertaining to various obstacles that have been identified. He noted that besides
11 the copyright issue, for example, there may be issues pertaining to coordination with other
12 codes and resource constraints.

13
14 Mr. Smith said DSA identified lack of resources as another major obstacle at the Building
15 Standards Commission's January hearing. He explained that DSA has experienced a 15 to
16 20 percent increase in workload over the past 12 months, so resources are much more
17 limited. DSA informed the Building Standards Commission that because of staffing
18 resource limitations, the timeline would have to be adjusted accordingly.

19
20 Mr. Smith commented that DSA also has concerns about economic or fiscal impacts on
21 DSA and its constituents, including school districts, design professionals, the construction
22 industry, and product manufacturers. The next Coordinating Council hearing, therefore, is
23 intended to provide an opportunity for input on those issues. Mr. Smith said a follow-up
24 meeting will probably be held before the March 16 Building Standards Commission
25 meeting.

26
27 Mr. Smith noted DSA staff will continue to articulate its current concerns regarding staff
28 resources, dragging out the process to the point the provisions are no longer current,
29 resolution of copyright issues, and possible fiscal and economic impacts. Mr. Smith added
30 that concrete data regarding cost impacts on school districts, design professionals, the
31 construction material, product manufacturers, and others would be helpful for the
32 Coordinating Council, and he welcomed suggestions from committee members.

33
34 Mr. Smith stated that DSA is striving for a code that is both cost-effective and doable,
35 without requiring hundreds of pages of amendments. He noted the staff determined
36 adopting the IBC would require fewer amendments than in the current code, so the
37 estimated workload associated with adopting that code would be one sixth or one eighth of
38 what the NFPA code requires. Mr. Smith added that in order to be effective and ensure the
39 new provisions are still current at the time of adoption, the entire code adoption process
40 should take no more than 12 to 18 months.

41
42 Mr. Kenneth Hall asked about the staff of the copyright issues. Mr. Smith responded that
43 NFPA wrote a letter last May indicating they were in the process of obtaining assurances
44 that the provisions could be used, but there has been no news since then.

1 Mr. Bob Dyson asked about the composition of the Coordinating Council. Mr. Smith
2 explained that the Coordinating Council is a statutory body under the Building Standards
3 Commission, composed of appointed representatives from each of the four code-adopting
4 agencies. Mr. Smith added that he was representing DSA on the Coordinating Council,
5 and there are people from OSHPD, State Fire Marshal's Office, Housing and Community
6 Development, California Energy Commission, and Department of Health Services.

7
8 Mr. Shih noted some state government reorganization proposals call for elimination of the
9 Building Standards Commission, and he asked what was likely to happen in that case. Mr.
10 Smith stated that he just saw a newspaper headline indicating the governor was backing off
11 on his proposal to eliminate 88 boards and commissions. He said he believed the Building
12 Standards Commission was included in that group. Mr. Smith added that until there are
13 changes, DSA has to operate under the current rules.

14 15 **B. Stakeholder Review Process Update**

16 Mr. Smith said DSA would like to integrate the Building Standards Committee into
17 developing the stakeholder review process. He noted the NFPA package is quite
18 complicated, so DSA can use help in dealing with this formidable task.

19
20 Mr. Smith commented that the staff needs to get a better handle on the scope of the
21 proposed amendments. Because of the substantial differences in the number of
22 amendments required for the two model codes, the amount of staff work required could
23 vary considerably, depending on what code is eventually adopted. For that reason, he
24 added, it may be premature to develop a process now.

25
26 Mr. Hall noted it might be possible to develop a stakeholder process now that would work
27 regardless of how many stakeholders are involved.

28
29 Mr. Smith said DSA staff plans to identify amendments that should be continued, modified,
30 or deleted, and then begin drafting the provisions that need to be added. He noted the staff
31 has particular concerns about diluting California's Current Zone 3 seismic standards, and
32 there are probably many stakeholders who would want to weigh in on that issue.

33
34 Mr. Smith asked if the Building Standards Committee wanted to serve as a forum for
35 stakeholder meetings. He noted this could help expedite the process and compress the
36 timeline to a six- to eight-month period.

37
38 Mr. Hall asked about DSA's estimated timeline for completing the code adoption process
39 for NFPA 5000. Mr. Smith estimated DSA's review timeline at close to three years; he
40 estimated the amendment packet for the IBC would take 12 to 15 months. He added that
41 the committee might need to meet monthly for a while to review and provide input on the
42 amendments as they are developed.

1 Mr. Smith noted the Building Standards Commission could make a decision at its May
2 meeting if no action is taken at the March meeting.

3
4 After some discussion, committee members agreed to hold off on this issue until more is
5 known about the future direction of the code adoption process.

6 7 **C. 2004 Code Supplement Update**

8 Mr. Smith reported that after a meeting last summer, the staff developed proposed changes
9 to the building code recommended for adoption and publication as a supplement. He noted
10 DSA developed a package last August, and he drew attention to the "Express Terms"
11 document in the meeting packet.

12
13 Mr. Smith said there are significant changes to Chapter 23, the wood chapter, on Pages 27
14 through 38. He noted adoption of the 2001 NDS wood design standards is proposed. Mr.
15 Smith commented that the proposed provisions were developed after considerable
16 dialogue, and they represent the consensus of the participants. He pointed out that
17 adopting the NDS standards reduces the number of required amendments from 35 in the
18 current code down to 12.

19
20 Mr. Smith drew attention to a few minor changes in the glu lam section, Pages 34 and 35.
21 He noted the changes in moisture requirements are consistent with national standards and
22 their inspection provisions. He said use of a lag bolt was eliminated, but the other
23 language remained the same.

24
25 Mr. Smith reported that the Building Standards Commission's Code Advisory Committee
26 reviewed and approved the package two weeks earlier. He said the provisions will be
27 subject to a 45-day public comment period beginning in May, and the Commission could
28 formally adopt them near the end of the year. In that case, the provisions would go into
29 effect as a supplement to the 1997 code in mid-2006. Mr. Smith added that DSA does not
30 expect the package to generate any controversy.

31
32 Mr. Smith welcomed comments on the package from committee members. He said DSA
33 would like to receive all comments by the end of June.

34 35 **D. Glu Lam Beam Continuous Inspection Requirement Update**

36 Mr. Shih proposed deferring discussion of this item until Mr. Art Ross arrived, and
37 committee members agreed.

38 39 **E. Plumbing & Mechanical Code Packages**

40 Mr. Smith noted the proposed package, reviewed by the committee last April, adopts the
41 2003 edition of the Uniform Mechanical Code and Uniform Plumbing Code. Mr. Smith said
42 the Code Advisory Committee approved the package, with just a few amendments, one of

1 which entailed accepting a recommendation from Robert Freedlander to not adopt the AL
2 PEX/AL products.

3
4 Mr. Smith said that the origin and purpose of some of the current Mechanical Code and
5 Plumbing Code amendments is unclear, so more research needs to be done before
6 proposing any changes. He suggested developing clean-up provisions at some point in the
7 future for both the Mechanical Code and Plumbing Code. He said other issues on which
8 the committee's input would be welcome include whether PEX and AL/PEX should be
9 allowed, ABS, PVC piping, and Table 4-1, regarding plumbing fixtures.

10
11 Mr. Shih welcomed Mr. Lowell Shields to the meeting at 10:55 a.m.

12
13 **III. New Items**

14 **A. Proposed Stop Work Order & Procedure**

15 Mr. Dennis Bellet noted that DSA adopted regulations last year providing for issuance of
16 stop work orders, and the staff developed an administrative procedure for stop work orders.
17 He said DSA's legal counsel recommends refining the provisions regarding what happens if
18 people do not comply. For example, he observed, there may be criminal penalties for
19 people who willingly violate stop work orders. Mr. Bellet suggested leaving these issues to
20 legal experts; he welcomed the committee's input on the proposed process described in IR
21 A-9.

22
23 Mr. Bellet clarified that stop work orders will be issued by DSA regional offices, and all stop
24 work orders must be signed by the regional manager and duly posted.

25
26 Mr. Hall asked if violation of a stop work order would be a misdemeanor or felony. Mr.
27 Bellet said the statute designates a violation is a felony. Mr. Hall pointed out that
28 misdemeanors have to be committed in the presence of the regional office staff, while a
29 felony does not have to meet that requirement. He noted filing a criminal complaint with the
30 local district attorney or attorney general could result in a court order to stop work.

31
32 Mr. Shih said he recalled past cases in which district attorneys were reluctant to prosecute
33 misdemeanors, so the local jurisdiction began issuing infractions. Inspectors were trained
34 to issue citations and testify in court. Mr. Hall commented that a person can simply pay a
35 fine for an infraction without showing up, but a misdemeanor requires a court appearance.

36
37 Mr. Shih noted it might be possible to develop a progressive system beginning with
38 infractions and progressing to misdemeanors. He said he was a bit concerned about the
39 ramifications of calling violations felonies.

40
41 Mr. Hall stated that another factor to be considered is whether citations need to be issued
42 by someone with a peace officer status. He noted that status provides the officer with a
43 level of immunity in later lawsuits.

1
2 Mr. Bellet clarified that the proposed process entails first issuing a notice to comply, with a
3 specific description of the violation, the necessary correction, and the time deadline to
4 avoid a stop work order.

5
6 Mr. Shih said some jurisdictions impose fines of double to ten times the fees in cases
7 where construction starts before proper permits are issued. He asked if DSA is proposing
8 any such provisions. Mr. Bellet commented that legal counsel will be reviewing the fines
9 and penalties provisions.

10
11 Mr. Hall suggested including a statement on notification forms saying: "Failure to comply
12 may subject you to penalties prescribed by law." Mr. Bellet drew attention to the language
13 on the left side of proposed DSA Form 351. Mr. Hall recommended changing the sentence
14 to warn recipients that failure to comply could result in more than "a fine upon conviction."

15
16 Mr. Hall noted the Fire Code has a section advising that the local police department will
17 assist in enforcement efforts. He suggested including something like that.

18
19 Mr. Pete Peterson recommended using simpler language in place of "contravention"; he
20 proposed "violation" instead. Committee members agreed that "violation" would be better.

21
22 Mr. Peterson asked if the stop work order could apply only to a portion of a project or
23 building. He suggested clarifying the cited portion versus the entire project. Committee
24 members noted the language speaks in terms of "area affected." Mr. Bellet stated that
25 DSA interprets the stop work order as applying to the whole project. He said the only work
26 that can proceed from that point is the recommended corrective action.

27
28 Mr. Hall commented that it might be better to have citations signed and issued by the field
29 engineers who observe the violation, and then have them approved by regional managers.

30
31 Mr. Dyson noted the introductory paragraph refers to plan review, and he questioned
32 whether IR A-9 was intended to apply to plan review. Mr. Bellet agreed that language
33 needs to be modified.

34
35 Referring the last paragraph on Page 2 and the first paragraph on Page 3, Mr. Hall
36 recommended referring to a staff position rather than naming Dennis Bellet. Other
37 committee members concurred.

38
39 Mr. Bellet thanked committee members for their input. He said he hoped to have more
40 information on the legal issues by the next meeting.

41
42 Mr. Dyson observed that DSA will probably be seeing more design-build school projects.
43 He recommended keeping that in mind with IR A-9 instead of targeting just design

professionals. He noted the scope should be broad enough to cover all that DSA encompasses.

Mr. Bellet acknowledged that the staff will have to be trained before implementing the stop work order procedures. Mr. Hall recommended finding out whether peace officer status is necessary for some enforcement measures.

B. Modular Building Ordinary Moment Frame Code Change Update

Mr. Chip Smith explained that regardless of which building code is adopted, the standard upon which it is based will prohibit an ordinary steel moment frame for a two-story modular building, a typical structure on many school campuses in California. He said the frames for these buildings are constructed in factories and transported to the site where the buildings are assembled. He clarified that these structures are just modular frames, not relocatable buildings. Mr. Smith noted typical buildings are 12 feet by 40 feet, and they are placed side-by-side or stacked.

Mr. Smith said there are eight major manufacturers of steel frames, and most are members of the School Facilities Manufacturers Association. He added that the association recognizes that the next code will create a problem, so DSA and association representatives have been meeting regularly to arrive at a proposal for an amendment.

Mr. Smith advised that the long-standing prohibition of steel frames was based on a type of ordinary frame that uses large, wide-flange steel sections that did not perform well in the Northridge earthquake. Modern modular frames typically use tube steel sections and small members with relatively small welds, so the prohibition may no longer be appropriate. Mr. Smith added that the staff has been unable to find evidence showing the steel frames are unsafe, and this type of steel frame was not considered when the latest NEHRP standards were developed. He pointed out that concrete data will be needed to support a rationale for changing current code requirements.

Mr. Bellet noted DSA wants to avoid any perception that current code requirements are being weakened in any way.

Mr. Shields emphasized the need for factual data to support the code requirements, and committee members agreed. Mr. Smith said the staff is in the fact-finding stage at this point.

Mr. Dyson suggested conducting tests on the new UC San Diego shake table. Mr. Shields recommended contacting Mr. Bill Staehlin for assistance.

Mr. Hall expressed concern that amending the code could weaken the current requirements. Mr. Smith explained that because this type of frame was not considered in the current code, DSA was considering whether it would be appropriate to draft new provisions.

At 11:45 a.m., the committee recessed for lunch. Mr. Shih reconvened the meeting at 12:45 p.m. He noted a quorum was present, with the arrival of Mr. Ross during the lunch break.

II.A. NFPA 5000 Code Development Update (Continued)

Mr. Smith welcomed assistance from committee members and DSA constituents in providing information to the Coordinating Council regarding possible economic impacts of adopting NFPA 5000. He said the Coordinating Council will be meeting on Tuesday, February 22, at 10:00 a.m., in the East End Auditorium. He distributed copies of the meeting agenda.

Mr. Hall observed that just the cost of purchasing all 16 volumes of the code books is a major problem for some local jurisdictions. Mr. Shields pointed out that local jurisdictions also need to purchase the reference standards.

Mr. Smith said DSA plans to inform the Coordinating Council that the workload to create amendments for NFPA 5000 will be roughly eight times the amendments required for the IBC. Those changes from the model also represent specialized training needs, both for DSA staff and constituents. Mr. Smith observed that drafting so many amendments poses a substantial burden for DSA, increases opportunities for errors, and slows down the plan approval process.

Mr. Shih expressed concern about the extensive amount and high cost of staff training.

Mr. Smith encouraged constituents to send economic impact information to Acting State Architect Richard Conrad.

II.D. Glu Lam Beam Continuous Inspection Requirement Update (Continued)

Mr. Chip Smith reported that DSA has been discussing this issue for about a year, but additional research needs to be done. He said the issue came to DSA's attention when APA complained that they were losing market share because of the current code prohibits. Mr. Smith noted DSA has asked inspection agencies for their input, and he drew attention to the January 13 letter from American Plywood Association (APA) withdrawing the request to waive special inspection of glu lam beams. In spite of the letter, he recommended that DSA continue to investigate the issue of whether continuous inspection requirements for glu lam beams should be loosened.

Mr. Smith advised that DSA's ten-year-old inspector exam is out of date, and there are no provisions addressing this need. He recommended a comprehensive review of the entire DSA program for qualifying special inspectors for glu lam inspection, current requirements and amendments, and possible changes. Mr. Smith reported that representatives from an inspection agency will be visiting DSA offices the next week to provide information.

1 Mr. Dyson asked how glu lams in school buildings were different from other buildings; for
2 example, he asked if there were tighter restrictions as far as finger joints, spacing, and
3 tension zones. Mr. Smith said he was not aware of any differences. He noted the Field Act
4 requires "continuous inspection" rather than "periodic inspection."

5
6 Mr. Ross expressed interest in attending the meeting with the inspection agency
7 representative. Mr. Smith said the meeting is scheduled for Thursday, February 24, at 1:30
8 p.m.

9
10 Mr. Ross commented that he believed there were some unique aspects of school
11 construction. He noted glu lams can fail if the load is reduced to a bare minimum. He
12 pointed out the purpose of DSA's plan-check and inspection is to achieve an end product
13 that is reasonably safe for California's school children. Mr. Ross recommended focusing
14 on ways of specifying acceptable safety parameters.

15
16 Mr. Dyson agreed, and said he was more concerned about preventing catastrophic failures
17 than defining a 16-inch depth limitation.

18
19 Mr. Ross said he disagreed with the entire premise of APA's January 13 letter.

20
21 Mr. Smith noted this issue has important ramifications for the special inspector certification
22 program that should be addressed. He recommended looking at other issues like proof
23 load and spacing as well. Mr. Smith said the staff will continue gathering facts and
24 updating the testing requirements for special inspectors.

25
26 **IV. Meeting Summary/Next Steps**

27 Mr. Shields encouraged the committee to reassess its mission and identify priority issues
28 for future meetings. He noted code adoption issues have taken most of the committee's
29 attention in recent months, so it might be wise to review and follow up on issues identified
30 before.

31
32 Mr. Hall recommended that the committee continue looking at due process issues involved
33 in stop work orders. Mr. Bellet said he would provide an update at the next meeting.

34
35 Ms. Aguayo noted the staff's list of follow-up items identifies major issues discussed by the
36 committee so far. Committee members asked for status reports on these items at the next
37 meeting.

38
39 Mr. Shih encouraged committee members to contact him with items they wanted to include
40 on future meeting agendas.

1 Mr. Peterson observed that there are code provisions setting thresholds for projects subject
2 to DSA review, and those figures are supposed to be updated annually. He suggested
3 looking at this issue.

4
5 Mr. Shields noted DSA staff had talked about updating the IR process to make sure all the
6 IR's are eventually incorporated into code amendments or discontinued. He added that it
7 might be prudent to wait on this task until the state decides which model code will be
8 adopted.

9
10 **V. Public Comments/New Business**

11 There were no members of the public who wished to address the committee.

12
13 Mr. Bellet said he attended a regional managers meeting earlier that day at which the
14 staff's activities were discussed and prioritized. He noted participants came up with a list
15 of about 60 different tasks, and the top priorities were: 1) stop work orders; 2) DSA's Policy
16 97-10, regarding using of HCD trailers on school sites for up to two years during
17 modernization projects; 3) creation of a task force for handling pre-checks and over-the-
18 counter approvals; and 4) looking at the use of construction managers. Mr. Bellet
19 welcomed committee feedback on these issues.

20
21 Mr. Shih proposed talking about these issues at the next committee meeting.

22
23 Mr. Bellet noted the regional managers also talked about installing photovoltaic panels on
24 rooftops.

25
26 Ms. Aguayo said another area on which DSA needs help is establishing a standard policy
27 providing a public participation process for policies and rulemaking. She added that the
28 staff will be bringing a draft policy to the committee at a future meeting.

29
30 Mr. Peterson asked progress in implementing the *Williams* lawsuit settlement. He noted
31 there are time limits for addressing certain repairs. Mr. Bellet said DSA is working to define
32 what kinds of projects trigger accessibility compliance. Mr. Peterson pointed out there will
33 be structural issues like mold, dryrot, and walkways that also need to be addressed.

34
35 Mr. Shields recommended that DSA put together a team of staff people to address
36 pertinent *Williams* issues and process improvements. He noted DSA will be seeing a huge
37 volume of survey responses over the next year. Mr. Smith welcomed assistance from the
38 committee in this area.

39
40 Mr. Shields observed the first step in implementing *Williams* will be the surveys, which must
41 be completed by the end of December, 2005. The second step will be defining the design
42 work that needs to be done. Mr. Shields emphasized the importance of having a way of
43 responding quickly to complaints.

1
2 Mr. Dyson noted the survey entails looking at every room, filling out an application on the
3 Website, and documenting conditions with photographs and other evidence. He said
4 *Williams* has a facilities component and a curriculum component, and DSA's primary
5 concern is school facilities.

6
7 Committee members asked the staff to provide an update on *Williams* implementation at
8 the next DSA Advisory Board meeting.

9
10 **VI. Schedule Next Meeting/Adjournment**

11 Mr. Shih proposed determining the date of the next committee meeting at the next quarterly
12 meeting of the DSA Advisory Board, and committee members agreed. Ms. Tarailo noted
13 the quarterly meeting is scheduled for Thursday, April 14.

14
15 Mr. Dyson observed that the Building Standards Commission might not be making a
16 decision on the model code adoption until as late as May.

17
18 There being no further business, Mr. Hall made a motion that the meeting be adjourned.
19 The motion was seconded by Mr. Shields, and the Building Standards Committee meeting
20 was adjourned at 1:37 p.m.